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**OFFICIAL BUSINESS - After Allowance**

Date: December 23, 2004  
 To: Office of Publications  
 Examiner Ha, Nguyen T.  
 Art Unit: 2831  
 Fax No.: 703-872-9306  
 From: Stephen P. Burr  
 Subject: U.S. Application Ser. No. 10/784,558  
 Filed: February 23, 2004  
 Conf. No.: 8665  
 Title: MULTILAYER BOARD HAVING PRECISE PERFORATIONS AND CIRCUIT  
 SUBSTRATE HAVING PRECISE THROUGH-HOLES  
 Our Ref.: 791\_200 CON

You should receive 10 page(s) including this cover sheet. If you do not receive all pages, please call (315) 233-8300.

**CERTIFICATION OF FACSIMILE TRANSMISSION**

I hereby certify that the following paper(s) is/are being facsimile transmitted to 703-872-9306 at the Patent and Trademark Office on December 23, 2004:

- Request For Acknowledgment of Receipt and Consideration of Information Disclosure Statement 1 page
- Courtesy copy of the Information Disclosure Statement filed October 6, 2004, including copies of the Form PTO-1449, postcard receipt and Express Mail receipt 8 pages
- This Cover Sheet 1 page

Total Pages 10

Melissa T. Kuczynski  
Melissa T. Kuczynski

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Practitioner's Docket No.: 791\_200 CON

DEC 23 2004

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

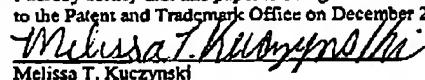
In re the application of: Yukihisa TAKEUCHI, Hiroyuki TSUJI, Kazumasa KITAMURA and  
Yoshinori YAMAGUCHI

Ser. No.: 10/784,558

Group Art Unit: 2831

Filed: February 23, 2004

Examiner: Ha, Nguyen T.

For: MULTILAYER BOARD HAVING PRECISE PERFORATIONS AND CIRCUIT  
SUBSTRATE HAVING PRECISE THROUGH-HOLESDate of mailing of PTOL 85 entitled "Notice of Allowance  
and Base Issue Fee Due" December 16, 2004Mail Stop Issue Fee  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450CERTIFICATION OF FACSIMILE  
TRANSMISSIONI hereby certify that this paper is being facsimile transmitted  
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Melissa T. Kuczynski

REQUEST FOR ACKNOWLEDGMENT OF RECEIPT AND CONSIDERATION OF  
INFORMATION DISCLOSURE STATEMENT

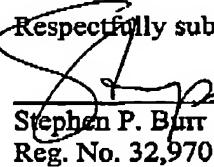
Sir:

Applicants respectfully request the U.S. Patent and Trademark Office to return another initialed copy of the PTO-1449 filed with Information Disclosure Statement on October 6, 2004, as acknowledgment of receipt and consideration of Reference AF cited therein. A courtesy copy of the PTO-1449 and Information Disclosure Statement as well as our postcard receipt, are enclosed.

**The Examiner did not initial Reference AF on the PTO-1449 form that was attached to the Notice of Allowance. Since it is believed that Reference AF was filed in compliance with the PTO Rules, it should have been considered by the Examiner.**

Should additional copies of the references cited in the Information Disclosure Statement be required, the appropriate Patent and Trademark Office official is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

  
 Stephen P. Burr  
 Reg. No. 32,970

SPB/mtk

BURR & BROWN  
P.O. Box 7068  
Syracuse, NY 13261-7068Customer No.: 25191  
Telephone: (315) 233-8300  
Facsimile: (315) 233-8320

Your mail room stamp hereon will acknowledge receipt of:

1. A Transmittal of Information Disclosure Statement under 37 CFR §1.97(c) (in duplicate)
2. A Certification under 37 CFR §1.97(e)
3. An Information Disclosure Statement
4. Form PTO-1449
5. A European Search Report dated September 13, 2004
6. References AA-AF (Refs. AA-AC not enclosed)

Applicant(s): Yukihisa TAKEUCHI, Hiroyuki TSUJI, Kazumasa KITAMURA and  
Yoshinori YAMAGUCHI

Ser. No.: 10/784,558

Date Filed: February 23, 2004

Our Docket No. 791\_200 CON

Conf. No.: 8665

Title: MULTILAYER BOARD HAVING PRECISE PERFORATIONS AND CIRCUIT  
SUBSTRATE HAVING PRECISE THROUGH-HOLES

Date of Mailing: October 6, 2004



520859US  
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Art Unit: 2831

Examiner:

SPB/gmh

Art Unit: 2831

Examiner:

SPB/gmh

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Practitioner's Docket No.: 791\_200 CON

**PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**In re the application of: Yukihisa TAKEUCHI, Hiroyuki TSUJI, Kazumasa KITAMURA  
and Yoshinori YAMAGUCHI

Ser. No.: 10/784,558

Art Unit: 2831

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Filed: February 23, 2004

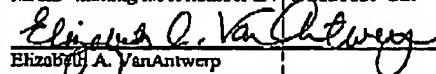
Examiner: Ha, Nguyen T.

DEC 23 2004

Confirmation No.: 8665

For: MULTILAYER BOARD HAVING PRECISE PERFORATIONS AND CIRCUIT  
SUBSTRATE HAVING PRECISE THROUGH-HOLESMail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

I hereby certify that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on October 6, 2004 under "EXPRESS MAIL" mailing label number EV472820859 US.


  
Elizabeth A. Van Antwerp
**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §1.97(e)****TIME OF TRANSMITTAL OF ACCOMPANYING  
INFORMATION DISCLOSURE STATEMENT**

1. The information disclosure statement transmitted herewith is being filed *after* three months of the filing date of this national application or the date of entry of the national stage as set forth in § 1.491 in an international application or after the mailing date of the first Office action on the merits, whichever event occurred last but *before* the mailing date of either:
  - (1) a final action under § 1.113,
  - (2) a notice of allowance under § 1.311 or
  - (3) an Office Action that closes prosecution.

**STATEMENT OR SUBMISSION FEE**

2. Accompanying this transmittal is
  - A.  a statement as specified in 37 CFR §1.97(e).
  - OR
  - B.  the submission fee set forth in 37 CFR §1.17(p) for submission of an information disclosure statement under §1.97(c). (\$180.00).

Fee due: \$ 00.00**COPY**

- 2 -

**METHOD OF PAYMENT OF FEE**

3.  Attached is a check in the amount of \$\_\_\_\_\_.
- Charge Account No. 50-1446 in the amount of \$\_\_\_\_\_. A duplicate of this request is attached.
4.  If any additional fees are due, please charge Deposit Account 50-1446.

Respectfully submitted,

  
Stephen P. Burr  
Reg. No. 32,970

October 6, 2004

Date

SPB/eav

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P.O. Box 7068  
Syracuse, NY 13261-7068

Customer No.: 025191  
Telephone: (315) 233-8300  
Facsimile: (315) 233-8320

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Practitioner's Docket No.: 791\_200 CON

**PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re patent application of: Yukihisa TAKEUCHI, Hiroyuki TSUJI, Kazumasa KITAMURA and Yoshinori YAMAGUCHI

**RECEIVED  
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Serial No.: 10/784,558

Art Unit: 2831

DEC 23 2004

Filed: February 23, 2004

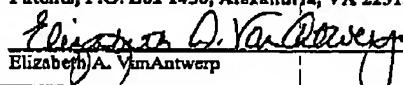
Examiner: Ha, Nguyen T.

Confirmation No.: 8665

For: MULTILAYER BOARD HAVING PRECISE PERFORATIONS AND CIRCUIT SUBSTRATE HAVING PRECISE THROUGH-HOLES

"EXPRESS MAIL" mailing label number EV 472820859 US.

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Elizabeth A. VanAntwerp

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATION UNDER 37 CFR §1.97(e)**

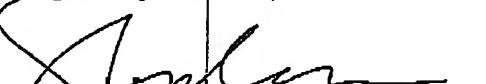
Sir:

Each item of information contained in the Information Disclosure Statement filed herewith was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.

OR

No item of information in the Information Disclosure Statement filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Respectfully submitted,

  
 Stephen P. Burr  
 Reg. No. 32,970

October 6, 2004

Date

SPB/eav

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**PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**In re the application of: Yukihisa TAKEUCHI, Hiroyuki TSUJI, Kazumasa KITAMURA  
and Yoshinori YAMAGUCHI

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US.

  
Elizabeth A. VanAntwerp**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449. Required copies of the references listed on Form PTO-1449 are attached.

Also enclosed is a copy of a European Search Report bearing a mailing date of September 13, 2004 from a corresponding European patent application, and the U.S. PTO is directed thereto for a concise statement of possible relevance of the references cited therein.

The above information is presented so that the Patent and Trademark Office may, in the first instance, determine any materiality thereof to the claimed invention. It is respectfully requested that the information be expressly considered during the prosecution of this

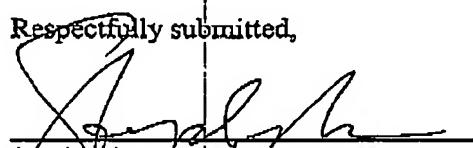
**COPY**

- 2 -

application, and that these references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,

  
Stephen P. Burr  
Reg. No. 32,970

October 6, 2004

Date

SPB/eav

BURR & BROWN  
P.O. Box 7068  
Syracuse, NY 13261-7068

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Form PTO-1449  US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<i>Complete if Known</i>			
		Application Number	10/784,558		
		Filing Date	February 23, 2004		
		First Named Inventor	Yukihisa TAKEUCHI		
		Art Unit	2831		
		Examiner Name	Ha, Nguyen T.		
		Confirmation No.	866S		
Sheet	1	of	1	Attorney Docket No.	791_200 CON

**U.S. PATENT DOCUMENTS**

Exam. Initial		Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date
	AA*	5,628,502	05-13-1997	Amarakoon				
	AB*	5,118,458	06-02-1992	Nishihara et al.				
	AC*	5,487,218	01-30-1996	Bhatt et al.				

**U.S. RELATED COPENDING APPLICATIONS**

Exam. Initial		Application/ Publication Number	Filing/ Publication Date	Inventor Name	Our Docket No.	Class	Sub Class

**FOREIGN PATENT DOCUMENTS**

		Document Number	Date	Country	Class	Sub Class	Translation	Abstract
	AD	09-019914 A1	01-21-1997	JP				✓
	AE	1 228 651	04-15-1971	GB				

**OTHER DOCUMENTS**  
(Including Author, Title, Date, Pertinent Pages etc.)

AF	Proceedings of 3rd International Conference on Multichip Modules, SPIE Vol. 2256, Denver, CO, 13-15 April 1994, 1994, pages 173-181, XP008033939, Reston, VA ISHM-Microelectronic Society, USA

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*In accordance with the Notice dated July 11, 2003 on the PTO website, we are not enclosing copies of any of the U.S. references listed above.



<p>Form PTO-1449 US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i></p> <p style="text-align: center;">OCT 06 2004 U.S. PATENT AND TRADEMARK OFFICE RECEIVED JULY 10 2005 U.S. PATENT AND TRADEMARK OFFICE</p>				<i>Complete if Known</i> <table border="1"> <tr> <td>Application Number</td> <td colspan="4">10/784,558</td> </tr> <tr> <td>Filing Date</td> <td colspan="4">February 23, 2004</td> </tr> <tr> <td>First Named Inventor</td> <td colspan="4">Yukihisa TAKEUCHI</td> </tr> <tr> <td>Art Unit</td> <td colspan="4">2831</td> </tr> <tr> <td>Examiner Name</td> <td colspan="4">Ha, Nguyen T.</td> </tr> <tr> <td>Confirmation No.</td> <td colspan="4">8665</td> </tr> <tr> <td>Sheet</td> <td>1</td> <td>of</td> <td>1</td> <td>Attorney Docket No.</td> <td colspan="4">791 200 CON</td> </tr> </table>					Application Number	10/784,558				Filing Date	February 23, 2004				First Named Inventor	Yukihisa TAKEUCHI				Art Unit	2831				Examiner Name	Ha, Nguyen T.				Confirmation No.	8665				Sheet	1	of	1	Attorney Docket No.	791 200 CON			
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Exam. Initial		Document Number	Date	Name	Our Docket No.	Class	Sub Class	Filing Date
XVH	AA*	5,628,502	05-13-1997	Amarakoon				
XVH	AB*	5,118,458	06-02-1992	Nishibara et al.				
XVH	AC*	5,487,218	01-30-1996	Bhatt et al.				

**U.S. RELATED COPENDING APPLICATIONS**

Exam. Initial		Application/ Publication Number	Filing/ Publication Date	Inventor Name	Our Docket No.	Class	Sub Class

**FOREIGN PATENT DOCUMENTS**

		Document Number	Date	Country	Class	Sub Class	Translation	Abstract
XVH	AD	09-019914 A1	01-21-1997	JP				✓
XVH	AE	1 228 651	04-15-1971	GB				

**OTHER DOCUMENTS**  
(Including Author, Title, Date, Pertinent Pages etc.)

AF	Proceedings of 3rd International Conference on Multichip Modules, SPIE Vol. 2256, Denver, CO, 13-15 April 1994, 1994, pages 173-181, XP008033939, Reston, VA ISHM-Microelectronic Society, USA

Examiner: *[Signature]* Date Considered: *12/10/04*

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*In accordance with the Notice dated July 11, 2003 on the PTO website, we are not enclosing copies of any of the U.S. references listed above.

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